

Cost Effective Low Carbon Powertrains for Future Vehicles

Programme and Registration Brochure

6 - 7 November 2006

IMechE, 1 Birdcage Walk, London, UK

www.imeche.org.uk/events/lowcarbon



Supported by The Tribology Group and The Automobile Division of the IMechE

Co-sponsored by



Cost Effective Low Carbon Powertrains for Future Vehicles

The key challenge facing the Automotive Industry is that of fuel economy, driven by the combined pressures of rising fuel costs, security of energy supply and the need for most countries to make real progress in CO2 reduction consistent with their commitments to 2008-2012 Kyoto targets.

Development and widespread application of new fuel, engine and transmission technologies at a cost/benefit level acceptable to the consumer will determine the rate at which reductions can be achieved. The economic viability of these technologies will be influenced by market infrastructure together with political and regulatory trends, with marked regional differences.

This conference will strategically address these challenges and identify future product technologies that can meet these diverse requirements in an increasingly global market.

Keynote presentations and papers will be presented by senior representatives from leading global automotive companies, fuel companies and regional government representing the views in Europe, USA and Japan. A panel of industry and government experts will also discuss key themes emerging from the conference and will conclude with a question and answer session.

Benefits of Attendance

- Attend a well structured conference covering the most important challenge facing the automotive industry
- All presentations are through invitations to leading senior engineers, researchers and government representatives from Europe, US and Japan
- Learn of the latest developments and solution for affordable low carbon power trains
- Opportunity for networking and discussions with highly qualified audience and members of the discussion panel

Who Should Attend

Attendance at this Conference will be invaluable to individuals involved in research and development, engineering design and technical management of automotive and energy systems and those active in the fuel and oil industries and academics wishing to learn of future research drivers.

Exhibition and Sponsorship

Why not take this opportunity to display an exhibition stand, or provide inserts about your company in the delegate packs? For more information contact Paul Terry on +44 (0) 20 7304 6867 or email pault@imeche.org.uk.

Organising Committee

Neville Jackson (Chair)
Dinos Arcoumanis
David Doyle

Ricardo
City University, London
Shell Global Solutions (UK)

Morgan Heikal
Grahame Cornforth

Brighton University
NTC Europe

PROGRAMME

Day One – 6 November 2006

08.30 Registration and Coffee

09.00 SESSION 1: FUTURE ENERGY SUPPLY AND AVAILABILITY

Transport Fuel Options for a Sustainable Future

Roger Cracknell, Fuel Innovation Manager, Shell Global Solutions

Future Fuel Production - Options & Challenges

Kevin Goodwin, Head of Refining Analysis, Global Fuels Technology, BP

The Outlook for Energy – a view to 2030

Nick Thomas, Director of Corporate Affairs, ExxonMobil

10.30 Morning Coffee

11.00 SESSIONS 2: GOVERNMENT TARGETS AND REGULATORY DRIVERS

The EU Strategy To Reduce CO2 Emissions From Light Duty-Vehicles - Progress & Options towards an "Integrated Approach"

Gilles Paque, Policy Officer, European Commission DG Environment

Future Japanese Fuel Economy Standard

Speaker TBC, MLIT Japan

12.30 Lunch

13.30 SESSION 3: THE ROLE FOR LOW CARBON FUELS

Renewable Fuels for Road Transport Applications

Frank Seyfried, Director, Engineering for Group Research (Powertrain, Fuels and Lubricants), Volkswagen

The Role for Future Low Carbon Fuels

Stefan Keppeler, Fuels and Services, Research Body & Powertrain, DaimlerChrysler

The Role for Bio-fuels in Sweden

Henrik Landalv, Manager, Environmental Projects, Volvo Powertrain Corporation

15.00 Afternoon Tea

15.30 SESSION 4: LOW CARBON STRATEGIES

Low Carbon Vehicle Strategies – Options and Potential Benefits

Neville Jackson, Technology Director, Ricardo UK Ltd

Innovations in SI Engine for Low Carbon Emission

Tomonori Urushihara, Manager, Power Source Laboratory, Nissan Research Center

Future Powertrains and Fuels for Sustainable Mobility

Wolfgang Steiger, Group Research - Director Powertrain, Volkswagen

17.00 End of Day One

18.30 Conference Dinner

The Conference Dinner will take place in the historic Butchers Hall, London. Transport to the venue will be provided and delegates are asked to make their own arrangements for returning home. Delegates should register for the Conference Dinner by ticking the appropriate box in the Registration Fees section of the Registration Form. The price for the Conference Dinner is £15.00 plus VAT for delegates (£50 + VAT for additional guests).

Day Two – 7 November 2006

08.30 KEYNOTE SPEECH

Senior UK Government Representative (TBC)

09.00 SESSION 1: INNOVATIONS IN POWERTRAINS

New Combustion Engine Technologies to Reduce Fuel Consumption

Speaker TBC, Honda

Engineering Low Carbon Powertrain: Trends and Technology

Bernhard Bühr, President, Robert Bosch

Future Transmission Technologies to Deliver Cost Effective Fuel Economy Benefits

Hamid Vahabzadeh, Director – Advanced Transmission Engineering, General Motors

10.30 Morning Coffee

11.00 SESSION 2: ALTERNATIVE MASS MARKET POWERTRAIN SYSTEMS

Further Carbon Reductions - Possibilities and Challenges for Passenger Car Powertrains

Dr. Matthias Wellers, Managing Director, AVL Schrick Ltd

Hydrogen and Fuel Cells for Automotive Application – The Solution for Low Carbon Road Transport

Jack Frost, Director, Fuel Cells, Johnson Matthey Technology Centre

Potential Impact of Alternative Powertrains on CO2 Emissions from the U.S. Light-Duty Vehicle Fleet

John B. Heywood, Sun Jae Professor of Mechanical Engineering, MIT

12.30 Lunch

13.30 PANEL DISCUSSION

Chaired by: Greg Archer, Director, Low Carbon Vehicle Partnership

Panel Members:

Roger Cracknell, Fuel Innovation Manager, Shell Global Solutions

Wolfgang Steiger, Group Research - Director Powertrain, Volkswagen

Gilles Paque, Policy Officer, European Commission DG Environment

John B. Heywood, Sun Jae Professor of Mechanical Engineering, MIT

Henrik Landalv, Manager, Environmental Projects, Volvo Powertrain Corporation

Jack Frost, Director, Fuel Cells, Johnson Matthey Technology Centre

The Programme is subject to amendment

GENERAL INFORMATION

REGISTRATION

To register please return the completed registration form with the appropriate remittance. The reduced IMechE member rate is also available to members of the following bodies: SAE, FISITA.

CANCELLATIONS

For a refund of fees (less £40 + VAT admin charge), cancellations must be made at least four weeks prior to the event. Replacement delegates are welcome at any time.

VENUE

The conference will be held at 1 Birdcage Walk, London SW1H 9JJ. Full details of how to reach the venue will be issued to delegates prior to the event.

ACCOMMODATION

The Corporate Team in association with the IMechE has arranged special discounted rates at local hotels for delegates. A list of hotels will be forwarded to delegates upon receipt of their registration and payment. Alternatively please contact the Corporate Team directly and quote ID number 8488.

Tel: 0845 6044060 (UK)/ +44 (0) 20 7592 3050 (Int.)

Fax: 020 7828 6439

Email: events@corporateteam.com

Website: www.corporateteam.com/events/8488ME

SPECIAL REQUIREMENTS

Please inform Suzanne Farrell of any special requirements (including dietary and access).

INSURANCE

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor the loss or damage to their luggage and/or personal belongings

ENQUIRIES

Please address enquiries to the relevant department:

Event enquiries:

Suzanne Farrell Tel: 020 7973 1316

Fax 020 7222 9881

Email: s_farrell@imeche.org.uk

Registration enquiries:

Tina Churcher Tel: 020 7973 1258

Fax 020 7222 9881

Email: t_churcher@imeche.org.uk

Membership of IMechE

Substantial discounts on attending events are available to IMechE Members. For full details of becoming a member of IMechE please contact the Membership Department on 0845 226 9191 Fax: 020 7090 1001

Membership Department
Institution of Mechanical Engineers
1 Birdcage Walk
London SW1H 9JJ

The Institution of Mechanical Engineers is a registered charity, number 206882

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C652

Fax completed form back to: +44 (0)20 7222 9881

Post to: Registration C652, IMechE, 1 Birdcage Walk, London SW1H 9JJ UK

Online booking on: www.imeche.org.uk/events/lowcarbon

Please complete in BLOCK CAPITALS

Surname		Date of Birth	
Title (e.g. Dr / Mr)		First Name	
Job Title			
Organisation / Company			
Mailing Address			
Postcode		Country	
Telephone		Fax	
Email			

REGISTRATION FEES:

(Includes attendance to the sessions, lunches, refreshments and a copy of the conference volume)

	FEE	VAT	TOTAL	PAYABLE
IMechE Member	£495.00	£86.63	£581.63	<input type="text"/>
Member of Co-sponsoring Organisation	£495.00	£86.63	£581.63	<input type="text"/>
Non Member	£595.00	£104.13	£699.13	<input type="text"/>
Student / Retired	£195.00	£34.12	£229.12	<input type="text"/>

EXTRA ITEMS

Invoice Charging (if applicable)	£10.00	£1.75	£11.75	<input type="text"/>
Delegate Conference Dinner Ticket	£15.00	£2.63	£17.63	<input type="text"/>
Additional Conference Dinner Ticket	£50.00	£8.75	£58.75	<input type="text"/>

TOTAL £

PLEASE DO NOT SEND PAYMENT SEPARATELY FROM THIS BOOKING FORM

Membership Status: Are you a:		None of these?	
Member of IMechE? Please tick		Member of a Co-Sponsoring Institution?* Please specify	
Fellow <input type="checkbox"/>	Affiliate <input type="checkbox"/>	Please tick <input type="checkbox"/>	
Member <input type="checkbox"/>	Student Affiliate <input type="checkbox"/>		
Associate Member <input type="checkbox"/>	Other IMechE <input type="checkbox"/>		
IMechE Membership No. (if applicable):		*see general information	

Please indicate method of payment

Cheque Credit Card Invoice Sterling Draft

Data Protection: The IMechE would like periodically to send you information on events, conferences and publications that you may be interested in. Would you like to receive such information? Yes No

LATE REGISTRATIONS:

After 24 October 2006 please phone 020 7973 1258 to confirm the availability of places and then fax a copy of the registration form to +44 (0)20 7222 9881

PAYMENT DETAILS:

By Cheque:

Cheques should be in Sterling and made payable to 'Institution of Mechanical Engineers'

By Credit Card:

Please charge my Eurocard/ Mastercard/ Visa * card (* delete as appropriate)
NB Diners Club, American Express and Maestro Cards are NOT accepted

Total amount £

Card no: _____

Valid from date Expiry date Signature

Address at which the card is registered (if different from overleaf)

.....

Authorisation code (office use only) Obtained by:

A VAT receipt will be issued upon card's authorisation

INVOICE DETAILS (UK DELEGATES ONLY):

Delegates wishing to be invoiced must provide an order number or the registration cannot be processed and will be returned. If your company does not use order numbers please enclose a formal request for invoicing on your company's letterhead.

A charge of £10 + VAT will be made for each invoice to cover additional administration costs

Order Number

Contact Name

Name and Address for invoicing

.....

.....

..... Post Code

Tel: Fax:

Invoices are payable on receipt and no alterations to these terms will be accepted.

PAYMENT BY OVERSEAS DELEGATES:

Overseas delegates may pay by credit card (see above) or by sterling draft drawn on a UK bank. NB The draft MUST accompany this form. And it is the delegate's responsibility to pay bank charges. Please note our bank details:

IMechE Current Account, Natwest Charing Cross Branch
Sort Code 60-40-05, Acc No 00817767.

We regret that we are unable to invoice overseas delegates.

VAT REG. NO. GB 299 9304 93

The Institution of Mechanical Engineers is a registered charity, number 206882

Please photocopy the reverse side if you wish to retain the full programme.
Alternatively the programme is available to view on the IMechE website at www.imeche.org.uk/events/lowcarbon